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SEP 01 2003

TECH CENTER 1600/2900

1653

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/444,281DATE: 08/30/2000  
TIME: 21:21:11Input Set : A:\411.app  
Output Set: N:\CRF3\08302000\I444281.raw

4 <110> APPLICANT: Burian, Jan  
5 Bartfeld, Daniel  
8 <120> TITLE OF INVENTION: EFFICIENT METHODS FOR PRODUCING  
9 ANTIMICROBIAL CATIONIC PEPTIDES IN HOST CELLS  
12 <130> FILE REFERENCE: 660081.411  
C--> 14 <140> CURRENT APPLICATION NUMBER: US/09/444,281  
15 <141> CURRENT FILING DATE: 1999-11-19  
17 <160> NUMBER OF SEQ ID NOS: 113  
19 <170> SOFTWARE: FastSEQ for Windows Version 3.0  
21 <210> SEQ ID NO: 1  
22 <211> LENGTH: 20  
23 <212> TYPE: DNA  
24 <213> ORGANISM: Artificial Sequence  
26 <220> FEATURE:  
27 <223> OTHER INFORMATION: Primer for PCR amplification  
29 <400> SEQUENCE: 1  
30 gcgtccgcg tagaggatcg 20  
32 <210> SEQ ID NO: 2  
33 <211> LENGTH: 25  
34 <212> TYPE: DNA  
35 <213> ORGANISM: Artificial Sequence  
37 <220> FEATURE:  
38 <223> OTHER INFORMATION: Primer for PCR amplification  
40 <400> SEQUENCE: 2  
41 ccgggatcca atgttgcaga agtag 25  
43 <210> SEQ ID NO: 3  
44 <211> LENGTH: 20  
45 <212> TYPE: DNA  
46 <213> ORGANISM: Artificial Sequence  
48 <220> FEATURE:  
49 <223> OTHER INFORMATION: Primer for PCR amplification  
51 <400> SEQUENCE: 3  
52 gcgtccgcg tagaggatcg 20  
54 <210> SEQ ID NO: 4  
55 <211> LENGTH: 38  
56 <212> TYPE: DNA  
57 <213> ORGANISM: Artificial Sequence  
59 <220> FEATURE:  
60 <223> OTHER INFORMATION: Primer for PCR amplification  
62 <400> SEQUENCE: 4  
63 atatggatcc agatatgtat cataggttga tgttggc 38  
65 <210> SEQ ID NO: 5  
66 <211> LENGTH: 39  
67 <212> TYPE: DNA  
68 <213> ORGANISM: Artificial Sequence  
70 <220> FEATURE:  
71 <223> OTHER INFORMATION: Synthesized oligonucleotide used as template for

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72      PCR
74 <400> SEQUENCE: 5
75 ttaaacgggg atccgtctca tatgatcctg aaaaaatgg          39
77 <210> SEQ ID NO: 6
78 <211> LENGTH: 49
79 <212> TYPE: DNA
80 <213> ORGANISM: Artificial Sequence
82 <220> FEATURE:
83 <223> OTHER INFORMATION: Synthesized Oligonucleotide used as a template for
84      PCR
86 <400> SEQUENCE: 6
87 ccggtgggc cgtggcgctcg taaataagct tgatatcttg gtacctgcg          49
89 <210> SEQ ID NO: 7
90 <211> LENGTH: 24
91 <212> TYPE: DNA
92 <213> ORGANISM: Artificial Sequence
94 <220> FEATURE:
95 <223> OTHER INFORMATION: Primer for PCR amplification
97 <400> SEQUENCE: 7
98 ttaaacgggg atccgtctca tata          24
100 <210> SEQ ID NO: 8
101 <211> LENGTH: 25
102 <212> TYPE: DNA
103 <213> ORGANISM: Artificial Sequence
105 <220> FEATURE:
106 <223> OTHER INFORMATION: Primer for PCR amplification
108 <400> SEQUENCE: 8
109 taagcttcat atcttggat ctgcg          25
111 <210> SEQ ID NO: 9
112 <211> LENGTH: 24
113 <212> TYPE: DNA
114 <213> ORGANISM: Artificial Sequence
116 <220> FEATURE:
117 <223> OTHER INFORMATION: Primer used for PCR modification of DNA fragment
118      encoding MBI-11
120 <400> SEQUENCE: 9
121 ttaaacgggg atccgtctca tata          24
123 <210> SEQ ID NO: 10
124 <211> LENGTH: 48
125 <212> TYPE: DNA
126 <213> ORGANISM: Artificial Sequence
128 <220> FEATURE:
129 <223> OTHER INFORMATION: Primer used for PCR modification of DNA fragment
130      encoding MBI-11
132 <400> SEQUENCE: 10
133 cgcgaagct aataatacat aattttacga cgccacggcc accacggc          48
135 <210> SEQ ID NO: 11
136 <211> LENGTH: 114
137 <212> TYPE: DNA

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138 <213> ORGANISM: Artificial Sequence
140 <220> FEATURE:
141 <223> OTHER INFORMATION: Synthesized oligonucleotide used as a template for
142 PCR
144 <400> SEQUENCE: 11
145 cgccagggtt ttcccgagtca cgacggatcc gtctcatatg atccctgaaaa aatggccgtg 60
146 gtggccgtgg cgtcgtaaaa ttaattgaat tcgtcatagc tggccgtgt gtga 114
148 <210> SEQ ID NO: 12
149 <211> LENGTH: 24
150 <212> TYPE: DNA
151 <213> ORGANISM: Artificial Sequence
153 <220> FEATURE:
154 <223> OTHER INFORMATION: Primer for PCR amplification
156 <400> SEQUENCE: 12
157 cgccagggtt ttcccgagtca cgac 24
159 <210> SEQ ID NO: 13
160 <211> LENGTH: 22
161 <212> TYPE: DNA
162 <213> ORGANISM: Artificial Sequence
164 <220> FEATURE:
165 <223> OTHER INFORMATION: Primer for PCR amplification
167 <400> SEQUENCE: 13
168 tcacacagga aacagctatg ac 22
170 <210> SEQ ID NO: 14
171 <211> LENGTH: 151
172 <212> TYPE: DNA
173 <213> ORGANISM: Artificial Sequence
175 <220> FEATURE:
176 <223> OTHER INFORMATION: Synthesized oligonucleotide used as a template for
177 PCR
179 <400> SEQUENCE: 14
180 cgccagggtt ttcccgagtca cgacggatcc gtctcatatg attctgcgtt ggccgtgg 60
181 gccgtggcgt cgcaaaaatga ttctgcgttg gccgtgggtt ccgtggcgtc gcaaaatggc 120
182 ggccttaagct tcgatccctc acggccggacg c 151
184 <210> SEQ ID NO: 15
185 <211> LENGTH: 24
186 <212> TYPE: DNA
187 <213> ORGANISM: Artificial Sequence
189 <220> FEATURE:
190 <223> OTHER INFORMATION: Primer for PCR amplification
192 <400> SEQUENCE: 15
193 cgccagggtt ttcccgagtca cgac 24
195 <210> SEQ ID NO: 16
196 <211> LENGTH: 20
197 <212> TYPE: DNA
198 <213> ORGANISM: Artificial Sequence
200 <220> FEATURE:
201 <223> OTHER INFORMATION: Primer for PCR amplification
203 <400> SEQUENCE: 16

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204  gcgtccggcg tagaggatcg
206 <210> SEQ ID NO: 17
207 <211> LENGTH: 108
208 <212> TYPE: DNA
209 <213> ORGANISM: Artificial Sequence
211 <220> FEATURE:
212 <223> OTHER INFORMATION: Synthesized oligonucleotide us as a template for
213   PCR
214 <400> SEQUENCE: 17
215  cgccagggtt ttcccaagtca cgacggatcc gtctcatatg attctgcgtt ggccgtggtg      60
216  gcccagggtt ttcccaagtca cgacggatcc gtctcatatg attctgcgtt ggccgtggtg      108
217  gccgtggcgt cgcaaaatgc ataagcttcg atcccttacgc ccggacgc
219 <210> SEQ ID NO: 18
220 <211> LENGTH: 24
221 <212> TYPE: DNA
222 <213> ORGANISM: Artificial Sequence
224 <220> FEATURE:
225 <223> OTHER INFORMATION: Primer for PCR amplification
227 <400> SEQUENCE: 18
228  cgccagggtt ttcccaagtca cgac
230 <210> SEQ ID NO: 19
231 <211> LENGTH: 20
232 <212> TYPE: DNA
233 <213> ORGANISM: Artificial Sequence
235 <220> FEATURE:
236 <223> OTHER INFORMATION: Primer for PCR amplification
238 <400> SEQUENCE: 19
239  gcgtccggcg tagaggatcg
241 <210> SEQ ID NO: 20
242 <211> LENGTH: 97
243 <212> TYPE: DNA
244 <213> ORGANISM: Artificial Sequence
246 <220> FEATURE:
247 <223> OTHER INFORMATION: Synthesized oligonucleotide used as a template for
248   PCR
250 <400> SEQUENCE: 20
251  cgccagggtt ttcccaagtca cgacggatcc gtctatgcat gaagcggAAC cggaAGCGGA      60
252  accgattaaat taagcttcga tcctctacgc cggacgc      97
254 <210> SEQ ID NO: 21
255 <211> LENGTH: 24
256 <212> TYPE: DNA
257 <213> ORGANISM: Artificial Sequence
259 <220> FEATURE:
260 <223> OTHER INFORMATION: Primer for PCR amplification
262 <400> SEQUENCE: 21
263  cgccagggtt ttcccaagtca cgac
265 <210> SEQ ID NO: 22
266 <211> LENGTH: 20
267 <212> TYPE: DNA
268 <213> ORGANISM: Artificial Sequence

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Input Set : A:\411.app  
 Output Set: N:\CRF3\08302000\I444281.raw

270 <220> FEATURE:  
 271 <223> OTHER INFORMATION: Primer for PCR amplification  
 273 <400> SEQUENCE: 22  
 274 gcttcggcg tagaggatcg 20  
 276 <210> SEQ ID NO: 23  
 277 <211> LENGTH: 114  
 278 <212> TYPE: DNA  
 279 <213> ORGANISM: Artificial Sequence  
 281 <220> FEATURE:  
 282 <223> OTHER INFORMATION: Synthesized oligonucleotide used as a template for  
 283 PCR  
 285 <400> SEQUENCE: 23 60  
 286 cgccagggtt ttcccaagtca cgacggatcc gtctcatatg actatgattc tgcgtggcc 114  
 287 gtgggtggcg tggcgctcgca aatgcataa gtttcgatcc tctacgccc acgc  
 289 <210> SEQ ID NO: 24  
 290 <211> LENGTH: 24  
 291 <212> TYPE: DNA  
 292 <213> ORGANISM: Artificial Sequence  
 294 <220> FEATURE:  
 295 <223> OTHER INFORMATION: Primer for PCR amplification  
 297 <400> SEQUENCE: 24 24  
 298 cgccagggtt ttcccaagtca cgac  
 300 <210> SEQ ID NO: 25  
 301 <211> LENGTH: 20  
 302 <212> TYPE: DNA  
 303 <213> ORGANISM: Artificial Sequence  
 305 <220> FEATURE:  
 306 <223> OTHER INFORMATION: Primer for PCR amplification  
 308 <400> SEQUENCE: 25 20  
 309 gcttcggcg tagaggatcg  
 311 <210> SEQ ID NO: 26  
 312 <211> LENGTH: 157  
 313 <212> TYPE: DNA  
 314 <213> ORGANISM: Artificial Sequence  
 316 <220> FEATURE:  
 317 <223> OTHER INFORMATION: Synthesized oligonucleotide used as a template for  
 318 PCR  
 320 <400> SEQUENCE: 26 60  
 321 cgccagggtt ttcccaagtca cgacggatcc gtctcatatg accatgaaat ggaaatcttt 120  
 322 catcaaaaaa ctgacctctg ctgctaaaaa agttgttacc accgctaaac cgctgatctc 157  
 323 tatgcatgt taagcttca tcctctacgc cggacgc  
 325 <210> SEQ ID NO: 27  
 326 <211> LENGTH: 11  
 327 <212> TYPE: PRT  
 328 <213> ORGANISM: Apis mellifera  
 330 <220> FEATURE:  
 331 <223> OTHER INFORMATION: Anionic spacer peptide  
 333 <400> SEQUENCE: 27  
 334 His Glu Ala Glu Pro Glu Ala Glu Pro Ile Met

VERIFICATION SUMMARY DATE: 08/30/2000  
PATENT APPLICATION: US/09/444,281 TIME: 21:21:12

Input Set : A:\411.app  
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L:14 M:270 C: Current Application Number differs, Replaced Current Application Number